DOCUMENT RESUME

ED 446 763 IR 020 397

AUTHOR Johnston, Timothy C.; Alexander, Lynn; Conrad, Craig; Fieser, James

TITLE Compensation Models for Teaching and Development of Asynchronous Courses.

PUB DATE 2000-00-00

NOTE 12p.; In: Proceedings of the Mid-South Instructional Technology Conference (Murfreesboro, TN, April 9-11, 2000); see IR 020 383.

AVAILABLE FROM For full text: http://www.mtsu.edu/~itconf/proceed00/johnston.html

PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS College Faculty; *Compensation (Remuneration); Computer Uses in Education; *Distance Education; Educational Technology; Faculty Workload; Higher Education; Intellectual Property; *Material Development; Models; Ownership; *Teacher Developed Materials

IDENTIFIERS *Course Development

ABSTRACT

This paper presents models of faculty compensation for teaching and development of asynchronous learning (ALN) courses. Faculty members' concerns include teaching workload, course development effort, and ownership of intellectual property associated with ALN teaching. The models presented show that the system for adjusting faculty compensation for traditional courses can accommodate ALN course development and teaching. Models for ALN teaching include regular pay, augmented regular pay, overload pay, pay-per-class, and pay-per student. Models for ALN course development include paid development, unpaid development, royalty, and share of revenue. The problem of assigning ownership of ALN intellectual property must be resolved if faculty are to fully embrace ALN teaching methods. (Contains 16 references.) (Author/MES)

Faculty Compensation Models for Online/Distance Education

Mid-South Instructional Technology Conference
Middle Tennessee State University
April 9-11, 2000

Timothy C. Johnston, **Lynn Alexander**, **Craig Conrad**, and **James Fieser**

"Compensation Models for Teaching and Development of Asychronous Courses"

Timothy C. Johnston
Assistant Professor
School of Business
University of Tennessee at Martin
Martin, TN 38237
Phone: (901) 587-7354
FAX: (520) 962-9723
Email: johnston@utm.edu

Compensation Models for Teaching and Development of Asychronous Courses (Abstract)

This paper presents models of faculty compensation for teaching and development of asynchronous learning (ALN) courses. Faculty members concerns include teaching workload, course development effort, and ownership of intellectual property associated with ALN teaching. The models presented show that the system for adjusting faculty compensation for traditional courses can accommodate ALN course development and teaching. The problem of assigning ownership of ALN intellectual property must be resolved if faculty are to fully embrace ALN teaching methods.

Compensation Models for Teaching and Development of Asychronous Courses

This paper examines the key issues of concern to faculty members regarding compensation for teaching and developing asynchronous learning (ALN) courses. The issues of teaching workload, course development, and intellectual property ownership are examined.

Examples of current practices will show that the system currently used to adjust compensation for traditional courses can accommodate pay for ALN course development and teaching. Various compensation models are discussed.

Scope of the research

This research will focus on the issues that concern faculty in the following context:

• Teaching of courses taken for credit toward accredited baccalaureate or graduate degrees. Accredited means by a body that is recognized by the U.S. Department of Education.

• Teaching in an asynchronous manner. A definition of asynchronous learning (ALN) is "self-study with substantial, rapid, asynchronous interactivity with others. In ALN, learners use computer and communications technologies to work with remote learning resources, including coaches and other learners, but without the requirement to be online at the same time." (ALNW 1999).

This definition of ALN is revised here to include asynchronous time or place. This broader definition includes the transmission of a live video signal, and the use of online text-based conferencing and chat tools, as ALN methods. These methods may involve asynchronous place, but synchronous time, for instructor and students.

• Teaching that is mediated by electronic means. This includes web-based or other computer network instruction, with or without content recorded on video. It excludes traditional correspondence courses (electronically delivered or not) and canned videotape courses if they involve primarily self-study with little interaction to be "mediated."

Compensation issues of concern to faculty

Asynchronous learning is very different from traditional face-to-face learning. Faculty members are concerned about increased teaching workload, greater course development effort, and uncertainty about ownership of intellectual property associated with ALN (Cox 1999; PBS Adult Learning 1999).

Teaching workload.

The workload in teaching an ALN course is greater than the workload in a

traditional course (SchWeber 1999). Coppola, Hintz & Rotter (1999) interviewed 20 experienced ALN faculty and found that increased workload was their greatest concern. Karelis (1999) stated that "high marginal cost internet-delivered instruction" has the highest demand for faculty time per student of several teaching options.

Traditional teaching involves a face-to-face meeting between a teacher and a group of students. A face-to-face meeting allows teacher and students to communicate with inherently greater "bandwidth" than do ALN methods. Bandwidth is the amount of information that can be delivered over a medium, per unit of time.

The words spoken in a traditional classroom lecture are augmented by facial expressions, body language, eye contact, and peer-to-peer communication. Teacher and students can interact easily in a face-to-face setting. Faculty members are concerned that they will have to work harder to make up for the loss of bandwidth in ALN teaching, by making frequent electronic contact with individual students.

Communication technology provides the bandwidth of ALN methods, and requires capital investment. Faculty may be asked to teach more students per course, or more courses, to pay off investments by institutions in ALN technology.

Course development effort.

Faculty members must work significantly harder to develop an ALN course than to develop a traditional course (SchWeber 1999). Preparation for teaching an ALN course is more labor-intensive. A faculty member may need to codify course content into digital form, and present this material on a web site, with hyperlinks. Many faculty members find that learning how to use new technology to codify and present the information is a major undertaking.

The material of an ALN course may differ from that of a traditional course in kind as well as form. ALN material may consist of more elaborate self-study components, as well as carefully orchestrated student-teacher contacts, peer-peer contacts, postings to discussion boards, and live discussions in chat rooms.

Ownership of course content.

Who owns the content of a course of study–the faculty member or the institution? A faculty member performs the task of arranging material into a traditional course of study. This "assorting" function adds novelty to the course, much like a retailer chooses a set of products that meets the needs of its customers. The "arrangement" of a traditional course resides in the person's mind and course notes, and becomes the intellectual property of the instructor. U.S. copyright law protects this arrangement (Salomon 1999).

What happens when the course design and material is codified into and stored in electronic form? Is this ALN property owned by the institution, by the faculty member, or jointly? Can the institution or faculty member license the course to other institutions? What happens if the faculty member leaves the institution–can he or she teach the course at another school? Can the institution keep teaching the course in his or her absence? These are all pressing questions to faculty members who face the prospect of codifying their knowledge into electronic form, without clear title to the results (PBS Adult Learning 1999).

Models for ALN Teaching

The role of faculty member in the ALN-enabled school is emerging, which makes it difficult to see how people will be compensated in the future. In the future, will ALN enable faculty to be more effective and efficient, and hence more valuable, as teachers? Or will ALN reduce teaching roles to the status of an adjunct instructor, and hence usher in doomsday for the fulltime faculty member? This paper assumes that in the short term the future of ALN teaching looks more like the status quo of traditional teaching than either of the two extreme scenarios.

Faculty members currently teach traditional lecture/discussion courses, very large lecture courses, small seminars, evening classes, and lab and studio classes, and others. The current system compensates for the various types of courses to make teaching them acceptable to faculty. This system can be used to adjust pay for ALN courses.

Faculty members who shoulder the extra workload involved in teaching an ALN course could be compensated with extra pay, decreased workload in other areas, or intangibles. The regular pay, augmented regular pay, overload, pay-per-class, and pay-per-student models are presented below.

Regular pay model:

One option is to compensate faculty for teaching of ALN courses at rates equivalent to those earned for teaching traditional courses. At a private West coast university that caters to working adults, an MBA Marketing Management class is taught online. Course materials include a textbook, and video clips and lecture text on the Web. The teacher and students discuss application questions by posting messages to a Web conference at their convenience.

The conference feature makes the workload of ALN teaching "about 1.5 times" that of a traditional class of similar size. Each student posts two comments to each discussion topic. The instructor responds to each posted message within 24 hours. This is a daily job, and the workload per student in an ALN class is "much higher" than a traditional class.

Faculty pay does not reflect this extra workload. A regular faculty member earns one credit toward a teaching workload of six courses for teaching an ALN course (the service or administration workload at this university is not known).

An AACSB-accredited mid-South business school offers a Marketing Strategy MBA course via live video and audio transmitted to remote sites. The "synchronous" time element makes this distance learning situation similar to a traditional class meeting. Some students meet at a different location than the professor, so the "asynchronous" place element precludes "face-to-face" interaction between all participants.

The limited communication bandwidth of video transmission creates additional work for the instructor. The faculty member must give extra effort to ensure that the system works and that students have received course material and sent assignments. The additional need to "project" information "over the wires," and elicit responses from afar, is an intangible but real burden on the distance video teacher.

A faculty member at this university receives no additional compensation for teaching a distance

learning class. He or she earns credit toward the "regular" workload that is identical to a traditional class. The class meets once per week. An ALN course may require the faculty member to travel to the class "studio," for which he or she receives reimbursement for mileage but no pay for "windshield time" en route.

A private East coast business school offers "Executive MBA" courses in an ALN format. The courses integrate marketing knowledge with other business disciplines. "Behavior in the Workplace and Marketplace" combines organizational behavior and marketing, and "Accounting Information and Customer Value" melds accounting and marketing. The courses are presented by a combination of lecture on compact disk (video clips, PowerPoint with audio) and a weekly 90 minute group online chat session.

Faculty members receive identical credit for teaching ALN and traditional courses. The extra effort to "tool up" to teach ALN courses discourages faculty who don't find the method "fun, interesting, and novel."

The East coast university contracts with eCollege, Inc. to develop courses (discussed later) and to manage the technology. The school pays eCollege $120 per student from the $1845 tuition per course each student pays. University administrators are pleased because the economics of ALN are good. ALN courses do not cannibalize traditional MBA courses. The university has used ALN to increase access to private higher education, and thereby developed a new market of students such as women with young children.

Augmented regular pay model:

Another option is for faculty to earn "extra credit" for ALN teaching. In a Sloan Center for Asynchronous Learning Environments (SCALE) study at the University of Illinois, a faculty member taught both traditional and ALN versions of intermediate microeconomics (Arvan, et. al. 1998). The instructor "believed a multiple of 1.5 times would be a fair estimate" for adjusting pay between a traditional and ALN course. In other words, the teacher of a 60-student traditional course would receive 1.0 teaching credit, while the teacher of a 180-student ALN course would receive 1.5 credits, toward a workload quota. In practice, these arrangements are rare.

Overload pay model:

Currently "overload" pay is awarded when a faculty member teaches a course in addition to his or her regular full-time teaching duties. In this way, compensation for ALN courses is kept separate from pay for traditional teaching. A faculty member teaching an "overload" course receives no credit toward a workload quota. The teacher is essentially "moonlighting" at his or her institution. This arrangement is common for courses in non-credit programs, such as executive seminars and continuing education.

One CarnegieTier 1 Research university in the midwest offers a Consumer Behavior class online. Students can take a course without meeting face-to-face with the instructor. Students access some course material via the Web, and view other material (PowerPoint presentations with audio) from a compact disk. Students communicate with the instructor via email.

The instructor teaches the course in addition to his or her "regular" faculty workload, and earns no extra credit. Each student pays fees of about $1280, and receives 3 credit hours for completing the course. The faculty member receives about $640 per student. The remaining $640 is split between the dean of the business school, the chair of the marketing department, the registrar, and the continuing education unit

(which handles the transaction).

This arrangement gives the instructor the opportunity to focus on teaching a manageable number of students at a distance, and earn reasonable pay for his or her efforts. The instructor loses if distance teaching efforts detract from his or her "regular" duties. The institution benefits by getting incremental revenue from distance learning, if the students are "new" and not cannibalized from traditional programs.

At the private East coast university a faculty member who chooses to teach an online class as an overload to regular teaching earns $3000. This relatively low level of pay is designed to discourage faculty from taking on extra teaching at the expense of research activities.

Pay-per-class model:

Adjunct instructors are paid on a per-class basis. At the private West coast university mentioned earlier, an adjunct instructor of MBA Marketing Management (ALN or traditional class) earns $3,500.

This model is different from the overload model in that an adjunct instructor may not have a full-time teaching salary to supplement with the per-class pay. An adjunct generally earns less for teaching on a per-class basis than a regular faculty member. A shift to using adjunct instructors from full-time faculty is a source of cost savings for a university.

Pay-per-student model:

Teachers of correspondence courses are often paid on a per-student basis. At one land-grant university, for example, authors of correspondence course workbooks are paid $1600. The instructor of the course, whether author or not, receives $100 for supervising each student who takes the course. This is the worst-case scenario of the future of ALN teaching compensation for full-time faculty.

Models for ALN course development

Compensation for faculty effort in developing an ALN course, and the ownership of the end product, are inextricably tied together. Therefore these issues will be addressed jointly.

Course development.

A faculty member who develops a "new" course of traditional type is often compensated with salary for time in the summer, and/or "release time" from other duties during the academic year. Release time is "pay" of one credit for traditional course development toward the ten credit annual teaching quota, for example. (Developing a new course is not the same as the instructor preparing to teach an established course.)

Any compensation model must recognize the tremendous amount of faculty effort needed to develop ALN content. Also, compensation for up-front development of a course may be traded off against an ongoing stream of revenue to the owner. Therefore any compensation plan must clearly define the ownership rights to the material.

Course ownership.

The output of traditional course development efforts resides with the faculty member. He or she retains ownership of this intellectual property. The institution gets "paid back" for its investment as the faculty member teaches the new traditional course to students. If the faculty member leaves the institution, the contract is ended and the faculty member is free to teach the course at another school.

The faculty member is usually constrained by an employment contract from offering a course outside of the institution while employed there. For example, Arthur Miller of Harvard Law was stopped from teaching an online law course at Concord University, news that made the front page of *the Wall Street Journal* (Dockser 1999). (Concord University School of Law is a unit of Kaplan Educational Centers, which is owned by the Washington Post Co.)

These terms would be appropriate for the person who develops a web-based component for a traditional course, for example. What about development efforts for "high production value" ALN courses? The development of a sophisticated web site, or production of videotapes, may involve a faculty member working with a team of people and expensive equipment. How is ownership of the intellectual property allocated between the faculty member, production team members, and institution?

For example, Dallas Telelearning (2000) delivers the "Accounting in Action" course via a combination of video and web means. The production team for the course included a faculty member, two 6-person industry advisory panels, a videographer, a musicologist, a course designer, and others.

Also, ALN courses are in a format that can be presented independent of the faculty member. Who owns the rights to present, license, or distribute the course material? Compensation and ownership issues are currently being addressed in a variety of ways, as illustrated by the paid development, unpaid development, royalty, and share of revenue models presented below.

Paid development model:

In the SCALE study mentioned earlier, the faculty member who developed ALN content for an intermediate microeconomics course received "release time" from teaching one course, summer salary, and other funding totaling about $42,000. Faculty compensation can vary widely, depending on the scope of the online development project and by discipline. In another SCALE project, a faculty member received about $7500 for developing ALN material for an intermediate Spanish grammar course. Faculty members retain no ownership rights for the ALN material.

At the private West coast university, the developer of MBA Marketing Management received "a small amount" of pay for his or her up-front work. Subsequent instructors of Marketing Management receive no development pay, regardless of any effort they exert to revise or expand the course. The course "template" and online lecture text belong to the university.

At the East coast private university, a faculty member receives $5000 for developing lecture material on compact disk for Executive MBA classes. This pay is "not enough," according to a faculty member, to compensate for the time and effort expended, unless the instructor teaches the course several times. In addition, eCollege Inc. earns a $3000 one-time fee per course for developing the Web presence. A policy on ownership of intellectual property has not been made, or was unknown to the instructor.

Unpaid development model:

Many faculty members are taking the initiative to develop ALN material without support from their university. Their compensation is the "payback" in a better learning experience for the instructor and students that they expect to receive by using technology in teaching. Others are developing complete ALN courses "on speculation" of compensation at a later date.

At the mid-South business school discussed earlier, pay for development and intellectual property issues are not a priority to faculty who teach via video transmission. The materials for a course to be delivered via distance video are much the same the materials for a traditional lecture/discussion course, albeit more work to develop. The course is not codified in a form that would beg the question of ownership. Lectures may be videotaped, and the title to copyright is unclear.

At the Midwest research university mentioned previously, the faculty member was not paid specifically for developing Consumer Behavior ALN content. The faculty member claimed the copyright on all materials. One would presume that under this arrangement a faculty member has sole rights to an ALN course, and could "take the course" to another institution if he or she changed jobs.

Royalty model:

This is another way for faculty to receive "future" compensation for current investments in development. Rather than receiving compensation for development from the university, the author of ALN content receives a royalty for each student who uses the material. This is the model that a publisher uses to compensate an author for developing a textbook.

Assuming that a faculty member has the discretion to use ALN material in teaching that is similar to the use of a textbook, and is paid accordingly, then the royalty model may be the simplest for all concerned. The royalty model allows the faculty and administrators to concentrate on teaching, and authors and publishers to focus on developing course materials.

There is a danger, however, that faculty will not have the discretion and compensation for ALN teaching that they earn for traditional teaching. Worse yet, instructors of traditional courses may be required to encode their knowledge into electronic form, without guarantee of ownership. This would effectively be a confiscation of their intellectual property.

In 1998, the faculty of York University in Toronto struck for 55 days to protest unilateral decisions by administration about the implementation of instructional technology. The full-time faculty won relief from these initiatives, in the form of contract wording that stated "a faculty member will not be required to convert a course (to electronic form) without his or her agreement" (Noble 1999).

Untenured York faculty members were required to codify their courses on video, CD-ROM, or the Internet or lose their jobs. They were later hired to teach the ALN courses at "a fraction of their former compensation" (Noble 1999).

Share of revenue model:

The "share of revenue" model is unusual in that it provides compensation to faculty after the work is done, but the compensation is front-loaded into the early offerings of the course.

This model pays a large but decreasing share of revenues to the developer of an ALN course, as he or she teaches it. David Ainsworth of Governors State University in University Park, IL described the following pay plan for ALN course development. The faculty member received 90% of the first $5,000 of net income, 60% of the next $5,000, 40% of the next $10,000, and 25% of income over $20,000. One person paid under this plan received a first check for $38,000 (PBS Adult Learning 1999).

This plan would be more desirable to a faculty member who is converting an existing course, with established student demand, than to a pioneer of a new course. Also, this per-unit pay plan is often used in risky new ventures. Faculty will be encouraged to participate in the transformation to ALN by receiving a generous proportion of each student's tuition. The more popular the course, the higher will be the pay for the instructor. There is a danger that, once the course is codified and established with continuing enrollments well past the break-even point, pay per course will be set at a fixed and much lower rate, and the institution will capture the surplus.

Limitations

These compensation models cannot answer many questions raised by the use of ALN methods. Is face-to-face meeting time between faculty and students an appropriate measure for faculty workload and compensation? How useful is "seat time" in a classroom to defining the amount of credit a student earns toward a degree? These questions will challenge the fundamental assumptions of the current system as ALN methods become more prevalent.

This research used accounts of exploratory work in the nascent ALN teaching industry. The examples presented here are from a convenience sample of marketing faculty members and courses. A representative sample of ALN courses would be needed to identify regularities in how faculty are compensated for ALN development and teaching.

Conclusion

Faculty members are concerned about increased teaching workload, greater course development effort, and uncertainty about ownership of intellectual property associated with ALN teaching. In the short term, the same system that is used now to adjust faculty compensation for traditional courses can accommodate ALN course development and teaching. In the long term, it is unlikely that faculty workload will be defined in terms of hours spent in a classroom. Technology will make this definition obsolete.

The problem of assigning ownership of ALN intellectual property is more difficult to address. Administrators, faculty senates, and faculty unions must wrestle with, and resolve, questions about intellectual property ownership if faculty are to fully embrace ALN teaching methods.

References:

ALNW. 1999. http://www.aln.org/alnweb/aln.htm

Coppola, Nancy, Roxanne Hiltz, and Naomi Rotter. 1999. Becoming a Virtual Professor: Pedagogical Changes and ALN. Proceedings of the Fifth Annual ALN Conference (Oct.). http://www.aln.org/alnconf99/presentations/convertedfiles/103/

Cox, Kevin. 1998. Costs and Online Education. *Web Tools Newsletter*. (Oct. 12). http://www.dco.cityu.edu.hk/tools/newslett/costsand.htm

Cox, Kevin. 1998. Costs of Online Education. *Web Tools Newsletter* (Dec. 11). http://www.dco.cityu.edu.hk/tools/newslett/costsof.htm

Dallas Telelearning. 1999. http://www.lecroy.dcccd.edu/prodsvcs/OnlineCourses/default.htm

Dallas Telelearning, 2000.

http://gln.dcccd.edu/plus/

Johnstone, D.B. 1996. Learning Productivity: A New Imperative for American Higher Education. *NLII Viewpoint* (1:1).

http://www.educause.edu/nlii/articles/johnstone.html

Karelis, Charles. 1999. Educational Technology and Cost Control. *Syllabus* 2 (6).

Katz, Richard N. 1998. *Dancing with the Devil: Information Technology and the New Competition in Higher Education.*. Jossey-Bass.

Marcus, Amy Dockser. (1999). Seeing Crimson: Why Harvard Law Wants to Rein In One Of Its Star Professors. *The Wall Street Journal*, 22 November.

Massy, W.R and R. Zemsky. 1995. Using Information Technology to Enhance Academic Productivity. Wingspread Enhancing Academic Productivity Conference (June).

http://www.educause.edu/nlii/keydocs/massy.html

Noble, David F. 1999. Digital Diploma Mills: The Automation of Higher Education. *First Monday* 3. http://www.firstmonday.dk/issues/issue3_1/noble/index.html

PBS Adult Learning. 1999. Faculty Pay in Distance Education. Teleconference (Jan. 28).

Salomon, Kenneth D. 1999. Report on Copyright and Digital Distance Education. Presentation to 8th Tennessee Statewide Continuing Education Conference (Oct.).

SchWeber, Claudine. 1999. Taking the Time to Teach Online: Faculty Concerns and Family Attitudes. Proceedings of the Fifth Annual ALN Conference (Oct). http://www.aln.org/alnconf99/presentations/convertedfiles/103/

Twigg, Carol A. and Diana G. Oblinger. 1996. The Virtual University. A Report from a Joint Educom/IBM Roundtable. Washington, D.C.:Educause (Nov.)

http://www.educause.edu/nlii/VU.html

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

☒ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").